

## CLAIMS

What is claimed is:

- 1        1. A method comprising:  
2        converting bytecodes into a graph of jop objects to track where jump  
3        operations pointed before modification of said bytecodes;  
4        adjusting constant pool references from local to global numbers based on  
5        said graph; and  
6        combining said bytecodes into a bundle.
- 1        2. The method as in claim 1 wherein adjusting further comprises:  
2        combining redundant constant pool entries to form a single global  
3        constant pool entry in a shared constant pool within said bundle.
- 1        3. The method as in claim 2 wherein one of said global constant pool  
2        entries is a methodref entry and an element identified by said global constant  
3        pool entry is a method copied to said bundle.
- 1        4. The method as in claim 2 wherein one of said global constant pool  
2        entries is a fieldref entry and an element identified by said global constant pool  
3        entry is a field copied to said bundle.s
- 1        5. The method as in claim 1 further comprising:  
2        performing a validation to insure that all constant pool references are  
3        properly resolved within said bundle.

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1           6. An article of manufacture containing a sequence of code which, when  
2     executed by a machine, cause said machine to perform the operations of:  
3         converting bytecodes into a graph of jop objects to track where jump  
4     operations pointed before modification of said bytecodes;  
5         adjusting constant pool references from local to global numbers based on  
6     said graph; and  
7         combining said bytecodes into a bundle.

1           7. The method as in claim 1 wherein adjusting further comprises:  
2         combining redundant constant pool entries to form a single global  
3     constant pool entry in a shared constant pool within said bundle.

1           8. The method as in claim 2 wherein one of said global constant pool  
2     entries is a methodref entry and an element identified by said global constant  
3     pool entry is a method copied to said bundle.

1           9. The method as in claim 2 wherein one of said global constant pool  
2     entries is a fieldref entry and an element identified by said global constant pool  
3     entry is a field copied to said bundle.s

1           10. The method as in claim 1 further comprising:  
2         performing a validation to insure that all constant pool references are  
3     properly resolved within said bundle.